"There is so much to find, but we must know how to search and who to trust."
– Peter Morville, from "Ambient Findability: What We Find Changes Who We Become"

The Digital Optimist

by George Lorenzo

There are times when I need to lay off the interviews and transcriptions that form the basis for 95 percent of the articles in *Educational Pathways* and just write about things that have been swirling around my work as an education journalist, researcher and author. The vehicle I use for this kind of writing is an occasional column titled "The Digital Optimist," although I am not always "optimistic."

The last time I composed a DO column was in the December 2005 issue in which I wrote about the Net Generation and emergency online learning. Other previous columns covered web services enabling technology, which is now referred to as Web 2.0 (August 2002); virtual high schools (September 2002); the marketing of distance education (April 2004); institutional e-portfolios, which is a very important topic that does not get enough educational press or interest (September 2005); and plenty of other important topics related to online teaching and learning (April 2005).

Beginning with Transparency

For this DO column, I'm going to start with some thoughts about being transparent online. How many times have you gone to a website to learn more about a company, organization, or an online learning course or program, only to be disappointed by the lack of information available? There's an overabundance of websites that neglect to feature details about who they are, what they stand for, where they are from, when they created the information they are disseminating, why they are doing what they are doing and how they are doing it.

I put the Educational Pathways, Lorenzo Associates, Inc., and "SurfingThroughNoise" (book in progress) web pages to this test and found them lacking in such information. So in the spirit of transparency, and for better or for worse, there are now several new pages that reveal much more information about who I am and the work underway here (see www.edpath.com/GeoBio.htm, www.edpath.com/research.htm and www.edpath.com/mystory.htm).

You may be surprised to know that all of three of these small, struggling-to-succeed enterprises are managed by a three-person family business. There are two other important people who have never been recognized publicly for how things get created here: My wife Gabriele and our daughter Lisa (their names are now in the staff box) are part-time employees of Lorenzo Associates, Inc. Gabriele is the subscription/office manager and proofreader. She handles all the administrative duties, and more, related to ensuring that EdPath subscriptions and renewal notices are up to date and accurate and that all subscribers who requested it are receiving their hard-copy issues by snail mail each month. Those of you who are long-time subscribers know how efficient this system is. Lisa, who is a sophomore in high school, is the ace who transcribes a good many of the interviews I conduct for EdPath, Lorenzo Associates and STN. There are times when I have hired some very intelligent graduate students to help with transcriptions. Lisa, who recently turned 16, has out shined them in speed and accuracy.

The main office for EdPath, Lorenzo Associates, and STN is in the basement of our home in Clarence Center, NY, which is located north of Buffalo. As motivational energy, I like to consider this similar to the many garage-started enterprises that have grown into profitable businesses.

On Blended Learning

As usual, I am a step or two behind where I should be for *Educational Pathways*. Last

month I was supposed to write the following review of "Blended Learning Research Perspectives," (BLRP) edited by Anthony G. Picciano and Charles D. Dziuban, published by the Sloan Consortium (see http://www. blendedteaching.org/).

Blended, as defined in BLRP, is:

1. Courses that integrate online with traditional face-to-face class activities in a planned, pedagogically valuable manner; and
2. Where a portion (institutionally defined) of face-to-face time is replaced by online activity.

The big take away of this book is that it will certainly help you avoid possible pitfalls if you are in the process of moving to a blended teaching and learning modality.

For example, the chapter titled "Discovering, Designing, and Delivering Hybrid Courses," by Robert Kaleta, Karen Skibba and Tanya Joosten from the University of Wisconsin-Milwaukee, is particularly loaded with recommendations for educators who may be in the process of developing blended learning environments. The University of Wisconsin-Milwaukee's Learning Technology Center is an early pioneer of blended learning (see April 2004 issue of Educational Pathways, "U-Milwaukee Project Prepares and Supports Instructors for Hybrids").

Kaleta et al presented some highly informative results of a qualitative research study they conducted that was based on the experiences of ten faculty who taught blended courses. They began by explaining that developing blended courses (those that replace a "significant" amount of face-to-face class time with online learning activities) is a big challenge; that faculty need to develop new teaching skills, as well as learn how to design blended courses in order for them to be effective; and that poorly designed and taught blended courses can be disastrous.

Their study probed into why instructors decided to teach in the blended mode in the first place, as well as how their roles changed during the implementation process. Some of their conclusions and recommendations include:

- Create an initiative that informs faculty about the benefits of blended learning.
- Start a faculty development program at least six months prior to when faculty will be actually teaching in the blended mode.
- Provide funding (stipends) and training to motivate faculty to adopt blended learning.
- Provide ongoing pedagogical and technical support, including opportunities for faculty to interact with experienced blended learning faculty.
- Faculty must learn to change from a lecture-centered teaching approach to a learner-centered teaching focus.
- Acquire and practice the skills needed to effectively manage and facilitate online discussions and interactions.
- Keep technology simple and gradually add more advanced technology.

Other chapters in BLRP covered assessment practices, enhancing student interaction, emerging patterns in student evaluation of blended learning, students perceptions of blended learning, an indepth literature review, and much more.

The final chapter of BLRP is a catalyst for some very deep thinking about higher education. It's titled "Everything I Need to Know About Blended Learning I Learned From Books," by Charles Dziuban, Joel Hartman and Patsy Moskal, from the University of Central Florida. Dziuban et al view blended learning as having the potential to impact nearly all students, faculty and campus support services, bringing with it numerous challenges and questions. "The answers - or at least useful insights - can be found in books," they claim.

The concepts of "The Fifth Discipline," by Peter Senge; "Diffusion of Innovation," by E. M. Rogers; "Managing Technological Change," by A. W. Bates; "The Innovator's Dilemma," by C.M. Christensen; and many other interesting and timely books are referred to and creatively applied to the challenges and notions inherent to developing blended learning environments at a larger institutional level. However, the authors are forced to conclude that "we need more research," and they ultimately come up with even more questions to get educators thinking deeper and more strategically about the implications and potential of a future in which blended learning environments are commonplace across American higher education.

And Speaking of Blended

I'd like to also mention, within this relatively brief review of blended teaching and learning, a few of my own insights from a recent Lorenzo Associates, Inc., project in which I interviewed 21 faculty who taught in the blended mode.

The overriding conclusion derived from those blended courses that did not fare well (which were not the majority of the 21) was that the instructors did not devote enough time and energy to accomplish two relatively simple tasks:

1. They did not provide proper and detailed instructions, nor did they stake out significant mandatory requirements, for what and how students should post to discussion forums.

2. They did not participate enough in the discussion forums themselves, resulting in a dreadful lack of teacher presence and consequently leaving the forums to the students' own devices, causing posts to be either insignificant, non-existent, and/or woefully lacking in meaningful interactions.

Online Learning's Failings?

This brings me to my personal experiences as an online learning graduate student. Thus far I have taken a total of three graduate - level fully online courses at two institutions. All three have been very disappointing for me. Two were very poor because of a severe lack of teacher presence in the online environment. One was truly horrible, with the instructor rarely entering the discussion forum and basically allowing students to post mundane, overly opinionated, non-research-oriented posts throughout the entire semester. In another course, the instructor did participate regularly in the discussion forum and did help steer the discussions into a positive flow that produced meaningful interaction. However, the two writing assignments (midterm and final) that were required of the class

were at the high-school level in complexity and basic requirements. Additionally, all three courses were entirely text based and lecture oriented instead of learner centered, making them very boring from both an educational technology and pedagogical perspective.

Such experiences make me question how effective online higher education is faring these days. While I have interviewed hundreds of faculty and administrators who have told me great things about the effectiveness of online teaching and learning, as well as having attended many positive conference proceedings about it and reviewed books, reports and case studies proclaiming the benefits and significant learning outcomes that occur in the online modality, I am still not totally in agreement with the claims of ubiquitous online learning success. I will say that online courses are flexible from a time-management perspective and basically ideal for busy, self-directed adult learners. But, overall, I'm not sure about how much online learning is actually happening. What can I say? I'm a skeptical journalist at heart who questions everything.

Miscellaneous Books Related to SurfingThroughNoise

There are a good number of other books that I feel are worth mentioning here. All are being digested as research for "SurfingThroughNoise: Riding the Online Knowledge Wave" (see www.edpath.com/stn.htm). They can all be considered related to online teaching and learning and our information age, as each features plenty of intelligence on how we gather information, learn on the web, interact with each other and share what we know

and what we have discovered and categorized online.

"Everything is Miscellaneous: The Power of the New Digital Disorder," by David Weinberger.

This book officially came out on May 1 and shot up to the top 100 Amazon rankings immediately. "Everything is Miscellaneous" is about the way information is ordered, or what Weinberger calls the "three orders of order."

The first order of order is about physically organizing things on shelves or in drawers and albums, such as books on shelves, silverware in drawers and photos in albums. The second order of order is about separating and/or segmenting information found in the first order, such as in book card catalogs, or through alphabetical listings and other identifiers and aids that help us find what we want. These first two orders are about how atoms are arranged and how "atoms tend to be unstable over time - paper yellows and disintegrates, negatives turn to soup - so we have to take measures to sway nature from its course . . . And things made of atoms can be in only one spot at a time, so we have to decide whether a photo of a soldier eating should go into the Civil war folder or the Outdoor meals folder." Enter the third order of order in which everything is digitized, where such limitations are removed and where "bits rule. And so does the miscellaneous." So now we have a kind of glorious disorder in which we put a phrase into a search engine and out comes everything and anything, giving us the power to organize and publish what we want to bring to the information table. We the people, in essence, are now just

as powerful as, and, in some cases, more powerful than, the editors and communication syndicates that once controlled the organization of information.

Weinberger further elaborates on his order/disorder theory in chapters with interesting-sounding titles such as "Smart Leaves, "Social Knowing," "What Nothing Says," and "Messiness as a Virtue." In "Social Knowing," he proclaims that "authority now comes from enabling us inescapably fallible creatures to explore the differences among us, together." In "Messiness is a Virtue," he writes that "in the sort-of, kind-of world in which a leaf can hang from many branches, our task becomes less to discover the one thing that something is than to see what it sort-of, kind-of, 73 percent is. The task of knowing is no longer to see the simple, It is to swim in the complex."

Overall, Weinberger's book helps us to see across the expanding ocean of complexity we call the World Wide Web and use it to create our own personal meaning and organize and share information as we see fit.

"Ambient Findability: What We Find Changes Who We Become," by Peter Morville

This should be read alongside "Everything is Miscellaneous." It too is geared toward helping us find our way (findability) and get a keener understanding of our ever-increasing and complex world of information overload. Also similar to Weinberger, Morville has chapter titles that make you think, such as "A Brief History of Wayfinding," "Interwingled" and "The Sociosemantic Web."

Early on Morville states that "as we map the emerging shore-line that connects the land of atoms and the sea of bits, findability serves as a useful lens for seeing where we've been and what lies ahead." And what is findability?" It's "A) The quality of being locatable or navigable. B) The degree to which a particular object is easy to discover or locate. C) The degree to which a system or environment supports navigation and retrieval." And what does ambient mean? It's "A) Surrounding, encircling: e.g., ambient sound. B) Completely enveloping."

"Ambient Findability" also brings up the fact that we can find just about whatever information we want to find online, that "findability invests freedom in the individual" and that we all have an "unprecedented ability to select our sources and choose our news." With all this at our disposal, indeed, information literacy has become "a core life skill."

"Ambient Findability" brings Morville to tell a very interesting story about the laws of Moore and Mooers. The law of Gordon Moore, founder of Intel, posits that integrated circuits continue to drive our insatiable desire for a faster-is-better and more-is-more digital age. Calvin Mooer, on the other hand, who is another computer pioneer who developed the punch card information retrieval system, proposed that many people may not want information because too much information only brings about more work. In other words, the advance of cheap processors enabling our information explosion over the Internet exists alongside the notions that "we cannot assume people will want our information, even if we know they need our information." (This is a problem I struggle with in trying to get more subscribers to Educational Pathways, for instance.) To make matters even more challenging, Morville notes that the "design of a useful information system requires a deep understanding of users and their social context." And, "behind most failed web sites, intranets and interactive products lies misguided models of users and their information-seeking behavior. Users are complex. Users are social. And so is information."

Morville then takes the reader through stories and examples intermingled with his analysis of such topics as the challenges and principals of information retrieval; how we rely on metadata and tagging; how there is "a fine line between the wisdom of crowds and the ignorance of mobs;" and how the advent of ubiquitous computing and new disruptive technologies, such as GPS, RFID tags and advances in surveillance technology, will alter our future like never before. He adds that "there's a real potential to improve the signal-to-noise ratio of our communications and consequently help both sender and receiver."

Overall, Morville's message is that our society needs to be more information literate, but we haven't been able to teach information literacy or come to a solid consensus about how to teach it. Plus, in most cases, we are hypocritical about it as we continue to overuse Google to, so to speak, unsuccessfully find the hard-to-find. Regardless, Morville is also optimistic, explaining how, as the book title suggests, we have become successful at discovering ourselves through the sheer immensity of valid information that resides on the World Wide Web.

"Infotopia: How Many Minds Produce Knowledge," by Cass R. Sunstein

This is another book that can feed a desire to learn more about where the Internet and World Wide Web are taking us and what we, as a society, might be able to do about where we are heading online. Sunstein's basic goal is to show us how groups might elicit the information they need via four methods. First, to arrive at an answer a group can take the average of the independent judgements of their members. Second, a group could deliberate and exchange information to arrive at an improved judgement. Third, groups can create a market and pricing system by which members and non-members can buy and sell things based on their judgements. Fourth, groups can utilize Internet technologies to obtain information and perspectives through such methods as mass surveys, forums, prediction markets, editable resources and open/community participation combined with filtering/screening processes. Ultimately, all four methods reveal how our information age, which Sunstein claims is in its first stage of a revolution, is defined by great promise and great peril.

On the Internet as supreme information aggregator, Sunstein notes that "every day like-minded people can and do sort themselves into echo chambers of their own design, leading to wild errors, undue confidence and unjustified extremism. But every day, the Internet also offers exceedingly valuable exercises in information aggregation, as people learn a great deal from the dispersed bits of information that other people have."

In the introduction of "Infotopia," Sunstein provides a succinct outline of the six chap-ters that comprise his work. Chapter one is an analysis of the resulting judgements of large groups and how the accuracy of such judgements is likely or unlikely under certain conditions. Chapters two and three focus on the art of group deliberations, and how "information pressures and social influences contribute to the amplifications of errors," regardless of the size of a group deliberation. In chapter four Sunstein writes about how prediction markets can perform well with uncanny accuracy but that the "task is to identify the circumstances in which predic-tion markets work well." In chapter five, Sunstein turns to wikis, open source software and blogs, showing how the views of many minds can produce positive results in business, science and medicine. Chapter six wraps everything together, offering an investigation into ways to im-prove the practice of group deliberation and how to obtain dispersed information that will facilitate progress instead of retrogressing.

To tie up this overview of some of the fresh information that has been published in books recently about the information age, I will briefly mention two more that students of the Internet might be interested in: "Wikinomics: How Mass Collaboration Changes Everything," by Don Tapscott and Anthony D. Williams and "Naked Conversations: How Blogs Are Changing The Way Businesses Talk With Customers," by Robert Scoble and Shel Israel.

"Wikinomics" stresses how the smart use of Internet-based tools, such as wikis, blogs and other information and communications technologies, is facilitating collaborations and peer produc-tion that allow companies to "reach beyond their walls to sow seeds of innovation and harvest a bountiful crop." The principles of "Wikinomics" are based on four ideas: openness, peering, sharing and acting globally. Openness is exploding, write the authors. The communication of previously secret corporate information to partners, employees, companies, customers and shareholders - in other words, being transparent - is a growing force in a networked economy. Peering is where people self-organize "to design goods or services, create knowledge, or simply to produce dynamic, shared experiences." The authors use Linux, among others, as a primary example of a highly successful peer-production enterprise. Sharing entails throwing out the notion that you should hold on to and vault up all of your proprietary resources, such as intellectual property, through patents, copyrights and trademarks. Instead "smart firms are treating intellectual property like a mutual fund - they manage a balanced portfolio of IP assets, some protected and some shared." Software can also fall into this category as the authors show how Skype, a free Internet-based phone service, went from 100,000 to 100 million registered users in two years and then was bought by eBay for $2.6 billion. Finally, acting globally is all about the rise in living standards we are witnessing in countries like China, India and South Korea that is bringing about a new global interdependence and flatter world. "Global alliances, human capital marketplaces and peer production communities will provide access to new markets, ideas and technologies," write Tapscott and Williams. "People and intellectual assets will need to be managed across cultures,

disciplines and international boundaries."

I have not found the time to read "Naked Conversations," but I plan on doing so. In the introduction, the authors state that their book "is about how and why you should join the conversation (in blogs). It also tells you how to blog smart to succeed - not from the perspective of what tools to use, but from the sense of what strategies to put in place and why. "Naked Conversations" tells you why employers should encourage middle and upper management team members to blog from their hearts, talking about the parts of the business they know best. We explain why it's good business to protect these employees from status quo guardians who would prefer to control and centralize messages." In addition, this book features numerous bloggers telling their own stories in their own words. The authors claim to both champion blogging as well as reveal its dark side.

Finally, to conclude this semi-long-winded tractate on books, I must mention one more important book that was a real pleasure to read as it helped put life into a better perspective for me after an overly long and depressing winter. "Five Minds For The Future," by Howard Gardner, offers sound advice about the cognitive abilities or "capacities" that people will need to cultivate in order to thrive in the world of the near future: the disciplinary mind, the synthesizing mind, the creating mind, the respectful mind and the ethical mind.

Under no uncertain terms, "with these minds," writes Gardner, "as I refer to them, a person will be well equipped to deal with what is expected, as well as what cannot be anticipated; without these minds, a person will be at the mercy of forces that he or she can't understand, let alone control."

For reasons I cannot specifically remember, this book did not really grab me until I reached the fourth chapter, which was on the creating mind. Here Gardner writes that "indeed, the acid test for creativity is simply stated: has the domain in which you operate been significantly altered by your contribution. The good news: because there is no statute of limitations, you can never know for sure that you have not been creative!" Gardner goes on to say that "all of us fail - because they are bold and ambitious - creators fail the most frequently and, often, the most dramatically. Only a person who is willing to pick herself up and try and try again is likely to forge creative achievements."

In addition to that great quote about creativity, and much more in this book, I found, near the end, the notes identifying pseudoforms of the five minds to be eye opening. Below are some pseudoforms worth noting:

Disciplined mind pseudoform: Asserting a mastery without a decade or so of practice.

Synthesizing mind pseudoform: Offering integrations that do not stand up to scrutiny.

Creating mind pseudoform: Offering apparent innovations that are superficial variations of long-existing knowledge.

Respectful mind pseudoform: Behaving reflexively toward an entire group, without attending to the qualities of specific individuals.

Ethical mind pseudoform: Expounding a good, responsible line but failing to embody that course in one's actions.

There are many more seemingly simple, yet informative and intelligent, moments in "Five Minds For The Future." I highly recommend it for everyone as a reminder of how we should act and react to life on Earth.

Recent News and Articles of Interest to Online Educators

To conclude this "Digital Optimist" column, I now turn to some interesting news briefs.

New Software Unleashes Kids' Creativity Online

The MIT Media Lab launched a new programming language that turns kids from media consumers into media producers, enabling them to create their own interactive stories, games, music and animation for the web.

With this new software, called Scratch, kids can program interactive creations by simply snapping together graphical blocks, much like LEGO(r) bricks, without any of the obscure punctuation and syntax of traditional programming languages. Kids can then share their interactive stories and games on the web, the same way they share videos on YouTube, engaging with other kids in an online community that provides inspiration and feedback.

"Until now, only expert programmers could make interactive creations for the web. Scratch opens the gates for everyone," says Mitchel Resnick, professor of Learning Research at the MIT Media Lab and head of the Scratch development team.

"As kids work on Scratch projects, they learn to think creatively and solve problems systematically - skills that are critical to success in the 21st century," says Resnick.

Designed for ages 8 and up, Scratch is available by free download from the Scratch website (http://scratch.mit.edu). The software runs on both PCs and Macs. The MIT Media Lab is now collaborating with other organizations - including Intel, Microsoft, Samsung, BT, the LEGO Group, Motorola, and One Laptop Per Child (OLPC) - to create other versions and applications of Scratch, including versions for mobile phones.

The name Scratch comes from the technique used by hip-hop disc jockeys, who spin vinyl records to mix music clips together in creative ways. Similarly, Scratch lets kids mix together a wide variety of media: graphics, photos, music, and sounds.

A glance at the Scratch website (http://scratch.mit.edu) reveals a kaleidoscope of projects created by kids: a story about a polar bear school, space attack games, and a break-dancing performance. Some creations are goofy and fun; some reveal serious social themes. Kids are constantly modifying and extending one another's projects on the website - and learning from one another in the process. "It's exciting to wake up each morning and see what's new on the site," said Resnick.

Scratch was developed by Resnick's Lifelong Kindergarten research group in collaboration with UCLA educational researchers, with financial support from the National Science Foundation and the Intel Foundation. Throughout the development process, the design team received feedback from children and teens at Intel Computer Clubhouses and school classrooms.

"There is a buzz in the room when the kids get going on Scratch projects," says Karen Randall, a teacher at the Expo Elementary School in St. Paul, Minnesota. "Students set design goals for their projects and problem-solve to fix program bugs. They collaborate, cooperate, co-teach. They appreciate the power that Scratch gives them to create their own versions of games and animations."

For more information about Scratch, see http://scratch.mit.edu/about.

Top-Ten IT Issues in Higher Ed

EDUCAUSE recently published the results its 2007 Current Issues Survey in EDUCAUSE Quarterly (EQ). The article identifies the issues that IT leaders in higher education see as their most critical challenges.

The 2007 survey gathered responses from 33 percent (591) of the 1,785 primary representatives of EDUCAUSE member institutions.

For the first time ever, Course/Learning Management Systems (C/LMS) moved into the top-ten ranking in two areas: number nine among issues of strategic importance and number seven with the potential to become more significant in the future. In addition, C/LMS jumped from eighth in 2006 to fifth in 2007 for its consumption of human and financial resources. The EQ article discusses to what extent this issue's emergence may have been influenced by the Blackboard patent controversy or whether it is emerging as a mission-critical enterprise system.

Additionally, Disaster Recovery/Business Continuity, which made a dramatic appearance last year as number four in strategic importance following the hurricane seasons of 2004 and 2005, continued among the top-ten in 2007 - fifth in strategic importance, fourth in potential to become more significant, and

eighth in IT leaders' time commitment.

The most dramatic change in ranking was the drop of Portals from fifth among issues expected to be more significant in 2006 to ninth in 2007. In future years as more institutions deploy and refine role-based information gateways, and as the technology becomes more robust, it may drop off the all-respondent aggregate measure.

A downloadable PDF of the entire report is available at www.educause.edu/LibraryDetail Page/666?ID=EQM0723.

"Crossing Borders: Higher Education Leadership in the Age of Access"

An impressive group of more than 50 educators, who can be considered major leaders in the world of distance education, met on March 23 at the Cosmos Club in Washington, D.C. for the Fourth Annual President's Forum of Excelsior College. The subject of the discussions was "Crossing Borders: Higher Education Leadership in the Age of Access." One panel spoke to the challenges of increasing access and ensuring quality in a complex

regulatory arena that lacks uniformity in its requirements and expectations. It was intended to raise issues of interstate program delivery and identify the expectations and needs of state regulators. Another panel discussed how accreditors and regulators agree on quality measures when they evaluate online education.

Paul Shiffman, Excelsior's Senior Administrator for Planning and Government Relations, welcomed the group and reminded them of the purpose of the Presidents' Forum: to facilitate dialogue among leaders in higher education to move from policy to practice in an online learning environment. He particularly welcomed the presence of state regulators at this meeting and said that a major question for this gathering is what it takes - what kinds of measures and information - to satisfy regulators and accreditors as to the acceptability of an institution of higher learning.

The summary notes from this important forum are available at http://presidentsforum. excelsior.edu/eve/forums/a/tpc/f/ 5261009534/m/4761009534/r/#.

Must Read for Online Education Administrators

Judith V. Boettcher wrote a very informative article in the April 2007 issue of *Campus Technology*, titled "Serving the Online Learner." This in-depth article begins with the following: "Systems and services for recruiting, advising, and support of online students have seldom been at the top of the list when planning online and distance learning programs. That is now changing: Forces pushing advising and support services into the foreground include recognition of the student learner as "customer" and the increasing expectations and demands of government and business in our global information economy. The recent release (September 2006) of the Spellings Commission report, *A Test of Leadership: Charting the Future of US Higher Education*, notes a lack of systems that track the progress of individual students over time and across institutions - and is sure to increase the focus on these systems."

To read the entire article, visit http://campustechnology.com/ articles/46400/.

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